Docket No.: 101896-719

(PATENT)

#### BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Edward B. Zalenski et al.

Application No. 10/750,173

Confirmation No. 5023

Filed: December 31, 2003

Art Unit: 3775

For: INSERTER INSTRUMENT AND IMPLANT

Examiner: Michael J. Araj

**CLIP** 

I hereby certify that this correspondence is being filed via EFS Web on the date

Dated: May 18, 2009 Signature:

(Ronald E. Cahill)

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### **REPLY BRIEF**

In response to the Examiner's Answer (dated March 19, 2009) to Appellant's Apeal Brief, Appellant addresses the Examiner's arguments as follows:

#### I. Introduction

Appellant has appealed the rejection of claims 1-7, 9, 11-13 and 15, and submitted an Appeal Brief on October 24, 2007. The Examiner filed an Answer to the Appeal Brief on March 19, 2009, to which Appellant now responds.

All of the bases for rejection have been addressed in the Appeal Brief, and Appellant submits this Reply Brief only to address the Examiner's "Response to Argument."

### II. Reply

The Examiner explains a number of the purported correspondences between Markworth and the claim elements for the first time in the Examiner's Answer. Applicant files this paper in order to address those arguments that have been newly made. In general, these newly made explanations involve replacing specific language in the claims that recite a relationship between other recited elements with an interpretation that means "in association with." In no case does claim 1 recite "in association with," and the Examiner is incorrect in replacing specific language in the claims with this meaningless phrase. In addition, the Examiner explains the Markworth instrument in ways that are physically impossible for the instrument meet, and interprets "actuating the trigger" and "releasing the trigger" (which cause two different actions in the claims and are clearly different) to be the same thing.

The reversal of the Examiner's incorrect reasoning in any one of the elements argued as items A through F (which match the identification of the arguments in both the Appeal Brief and the Answer) below, must result in a reversal of the anticipation rejection.

# A. Markworth Fails to Disclose an Outer Sleeve that is Mechanically Coupled to a Frame

Claim 1	Examiner's Correspondence in Markworth	Applicant's Position
"outer sleeve mechanically coupled to the frame"	"outer sleeve, 400, mechnically coupled to the frame"	outer sleeve 400 is mechanically coupled to the slide 300 – not to the frame 200

The Examiner's response to Applicant's arguments is that "mechanically coupled to" means "is associated with." The bases for this redefinition are the elimination for no reason of the words "mechanically" and "to", and an online dictionary:

Applicant argues that Markworth is not mechanically coupled to the frame, but rather is connected to the distal end of the slide for sliding movement. The definition of coupled can be taken from dictionary.com defining "to fasten, link, or associate together in a pair or pairs" (definition 8). It is clear that the outer sleeve (400) is coupled/associated with the frame of Markworth (Fig. 1B).

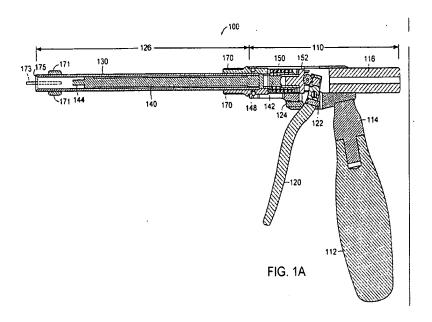
While the Examiner is entitled to give claim language its broadest reasonable interpretation, that interpretation must be reasonable. See, e.g., In re Buszard, 2007 U.S. App. LEXIS 22806 (Fed. Cir., September 27, 2007) (Reversing rejection made by Board based upon an unreasonably broad interpretation of the claim term "flexible polyurethane foam reaction mixture" as "any reaction mixture which produces, at least ultimately, a flexible polyurethane foam.") MPEP § 2111 further lays out the "broadest reasonable interpretation" standard:

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." The Federal Circuit's en banc decision in Phillips v. AWH Corp., 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the "broadest reasonable interpretation" standard:

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75(d)(1).

415 F.3d at 1316, 75 USPQ2d at 1329. See also, In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).

When viewed reasonably, "mechanically coupled to" does not mean "is associated with." The mechanical coupling is clearly illustrated in the specification with respect to the frame and the outer sleeve. As noted in the Detailed Description of the present application, knob 170 is "mechanically attached to outer sleeve 130 to allow outer sleeve 130 and inner shaft 140 to rotate about driver body assembly 110." This relationship is illustrated in Figure 1A:



Here, the knob 170 is the mechanical coupling that mechanically couples the outer sleeve 130 to the frame or driver body assembly 110. The elements and their relationship is clear. The Examiner does not apply the clear legal standards and, as was the case in *Buszard*, the rejection can be reversed on this basis alone.

The Examiner also states without basis or explanation:

If the outer sleeve was not mechanically coupled to the frame then the device of Markworth would be able to function properly.

Resort to the Markworth reference is instructive. The Examiner refers to Figure 1B of Markworth:

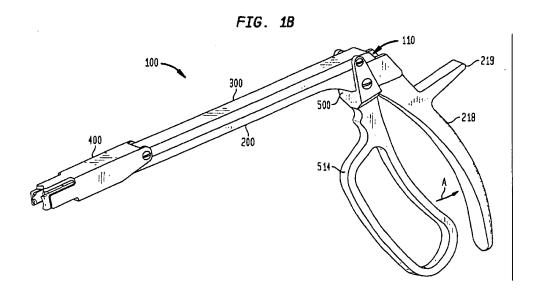
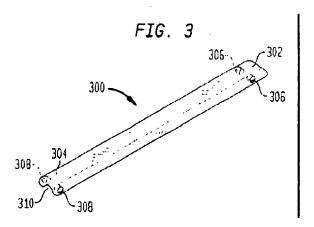


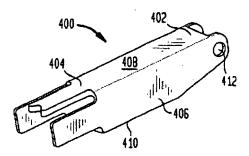
Figure 1B of Markworth clearly shows that the sleeve 400 is mechanically coupled to the slide 300 by screws 112 (numbered in Figure 1A). Throughout this prosecution, the Examiner has never identified which portion of the Markworth device corresponds to the "frame" of claim 1. Applicant has suggested that it would be body 200 and that suggestion has not been rebutted. It is clear from the Figure that the mechanical coupling is between the slide 300 and the sleeve 400, and not between the frame 200 and the sleeve 400 as required by the claim.

Resort to further Figures of Markworth makes the relationship between these parts even clearer. Slide 300 has threaded holes at its second/distal end:

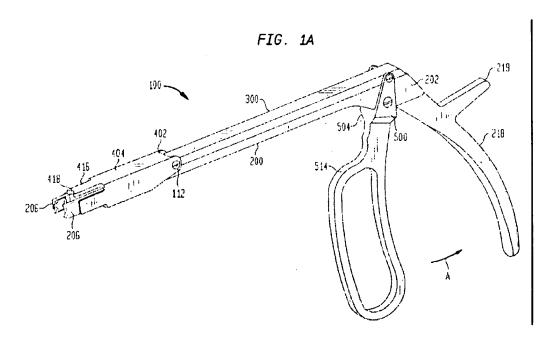


The sleeve 400 has holes 412 on its proximal end:

FIG. 4



As shown in Figure 1A, for example, the screw 112 passes through hole 412 on the sleeve 400 and threads into threaded hole 308 on the slide 300 to mechanically couple the sleeve to the slide:



The slide 300 slides on top of body 200.

There is no doubt that the sleeve 400 is mechanically coupled to the slide 300 – the screw 112 is the mechanical coupling that couples these parts together. The Examiner is wrong that "mechanically coupled to" can be replaced by "is associated with." This is not a reasonable construction of the claim.

The Examiner's improper interpretation of the claim term "mechanically coupled to" as "is associated with" should be reversed, and the Board should hold that the outer sleeve of Markworth is not mechanically coupled to the frame.

## B. Markworth Fails to Disclose an Inner Shaft Having a Grabber

Claim 1	Examiner's Correspondence in Markworth	Applicant's Position
"inner shaft having a grabber for mechanically engaging an implant"	"an inner shaft, 300, having a grabber, 206,"	Markworth's "grabber" is integral with its "frame" 200 – it is not on the "inner shaft" 300 – the inner shaft does not "have" it

The Examiner's response to Applicant's arguments appears to change the meaning of "has" to "in association with." This time, as opposed to the express redefining as was done in "A" above, the Examiner simply states that the grabber of Markworth is "in association with" the inner shaft:

Applicant argues that the cited grabber (206) in Markworth is not on the "inner shaft". All that is required of element (iii) of claim 1 is that an inner shaft has a grabber. It does not require that the grabber be connected to the inner shaft. The inner shaft ahs [sic] a grabber (206) is in [sic] association with the inner shaft (300) wherein the inner shaft slidably disposed [sic] along a major axis of the inner shaft within the outer sleeve. Even though the grabber (206) may be connected to element 200, the claim still reads on Markworth. The inner shaft has a grabber.

In addition to redefining "has" to mean "in association with," the Examiner also relies on a "the hip-bone is connected to the thigh-bone" logic. There can be no doubt that the "grabber" 206 of Markworth is integrally formed with the "frame" 200 – Figure 2 of Markworth makes that perfectly clear. So the Examiner's logic works like this:

- (1) the grabber is connected to "frame" 200;
- (2) "inner shaft" 300 slides on "frame" 200;

(3) therefore: "inner shaft" 300 "is associated with" "grabber" 206; and

(4) the claim language is met because the "inner shaft" 300 "has" a "grabber" 206.

If this logic were not tenuous enough on its face so as not to support an anticipation rejection, the grammar of the claim clearly belies it. The claim recites "an outer sleeve mechanically coupled to a frame," and:

an inner shaft having a grabber for mechanically engaging an implant, the inner shaft slidably disposed along a major axis of the inner shaft within the outer sleeve, whereby actuation of the trigger extends the grabber from the outer sleeve to thereby release the implant;

Placing the grabber on the inner shaft is important (and "an inner shaft having a grabber" does tell you where it is located) because if, as the Examiner states, the grabber could be anywhere on the instrument as long as "the hip-bone is connected to the thigh-bone," then the grabber could wind up in places where it cannot work as recited. In Markworth, the grabber is integral with the frame. In the claim, the outer sleeve is mechanically coupled to the frame – if the grabber were integrally formed with the frame, the sliding of the inner shaft with respect to the outer sleeve could not cause the grabber to extend from the outer sleeve.

Markworth does not disclose an "inner shaft having a grabber" as recited by the claim.

# C. Markworth Fails to Disclose an Inner Shaft Slidably Disposed within an Outer Sleeve

Claim 1	Examiner's Correspondence in Markworth	Applicant's Position
"the inner shaft slidably disposed along a major axis of the inner shaft within the outer sleeve"	"wherein the inner shaft is slidably disposed along a major axis of the inners haft [sic] within the outer sleeve"	the Examiner's "inner shaft" is pivotally connected to the "outer sleeve" – they do not slide with respect to each other

The Examiner's is simply wrong. Importantly, the Examiner fails to use Markworth's element numbers in making out the rejection. This is because there is a subtle "element shifting"

in the rejection. Throughout the rejection, the Examiner refers to "inner shaft" 300 – indicating that it is the slide 300 from Markworth that corresponds to the inner shaft of the claims. Indeed, the rejections under A and B above rely on this. But then, to find correspondence for this element, the correspondence actually changes:

Applicant argues that Markworth is not slidably disposed within the outer sleeve because the outer sleeve is pivotally connected to the distal end of the inner shaft and it does not and cannot slide with respect to it. It can be seen with respect to Figures 7A and 7B that the inner shaft slides within the outer sleeve (400) of Markworth because the grabber changes its distance from element 418. Therefore, the inner shaft is slidably disposed within an outer sleeve of Markworth.

Looking at Figures 7A and 7B – it is clear that it is the "frame" 200 of Markworth that is under the "outer sleeve" 400, and not the inner shaft as required by the claim. Applicant reproduces drawings above in Section A to show how screws 112 hold the "outer sleeve" to the distal, second end of the "inner shaft" 300. It is physically impossible for "inner shaft" 300 to be slidably disposed along a major axis of the inner shaft within the "outer sleeve" 400 because two screws hold these parts against such sliding. Markworth cannot anticipate based on the correspondence of elements that the Examiner uses.

# D. Markworth Fails to Disclose that Actuation of a Trigger is Effective to Extend a Grabber from an Outer Sleeve to Thereby Release an Implant

Claim 1		s Correspondence in Markworth	Applicant's Position
"whereby actuation o trigger extends the gr from the outer sleeve thereby release the in	abber trigger exter to from the out	ectuation of the ends the grabber uter sleeve to ease the implant"	Actuation of the Markworth trigger actually retracts the "grabber" 206 into the "outer sleeve" 400

There can be little doubt as to what it means to actuate a trigger. One actuates a trigger in gun-handle-styled instrument by "squeezing the trigger." The instant specification makes clear that the desired effect is actuated by squeezing the trigger mechanism 120 toward the handle 112. [See, for example, paragraphs 41, 55, 56 and 57 of the application as published in US 2005/0143748 A1.]

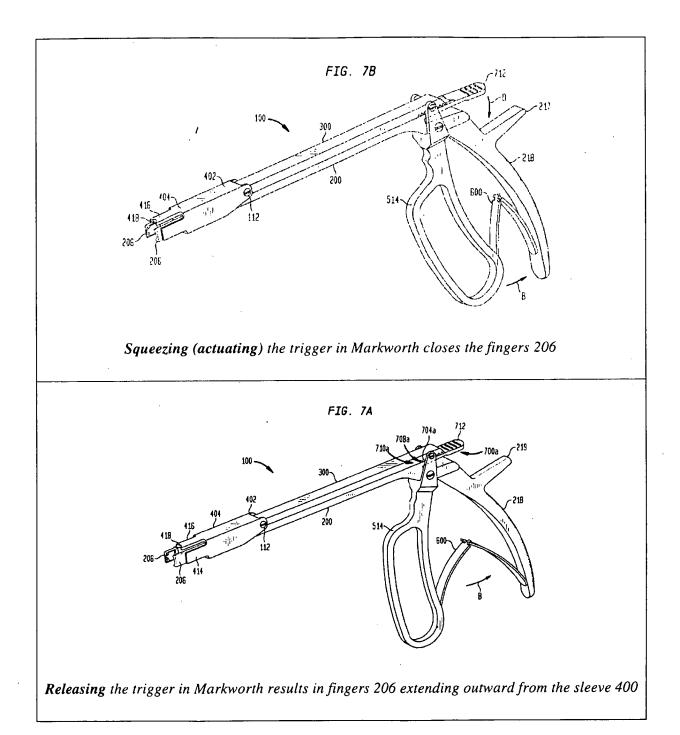
The Examiner's response to Applicant's arguments for the first time explains how Markworth, which operates in a fashion that is the exact opposite of the claimed structure, can anticipate it – the trigger in Markworth is not actuated according to the Examiner by squeezing it, rather, the trigger is actuated by releasing the trigger after it has already been squeezed:

Actuation of the trigger will extend the grabber from the outer sleeve of the device to release the implant. When the trigger (500) is actuated in a direction towards element 218 the device will grab onto an implant and the grabber moves towards the outer sleeve (400). But when the trigger (500) is actuated in the opposite direction, then the trigger extends the grabber (206) from the outer sleeve to thereby release the implant.

Applicant submits that the proper scope of actuating the trigger is squeezing it. The Examiner's correspondence with a release of the trigger after it has been squeezed is unreasonable.

Further and perhaps more importantly, releasing the trigger and the effect that releasing the trigger has is separately recited in the claim. It cannot be that actuating the trigger means releasing it – if actuating could mean releasing, then what does releasing mean?

Turning to the actual disclosure of Markworth is again illuminating:



There can be no doubt that actuating the trigger is squeezing the trigger in Markworth, and it closes the fingers rather than extending them as recited in the claim. As discussed in section F below, releasing the trigger results in extending the fingers in Markworth as opposed to

bringing them within the outer sleeve. It is once again impossible for Markworth to meet the claim language.

E. Markworth Fails to Disclose a Retaining Element for Directing the Grabber Toward a Closed Position

Claim 1	Examiner's Correspondence in Markworth	Applicant's Position
"a retaining element for directing the grabber toward a closed position"	"a retaining spring element, 600, for directing the grabber toward a closed position"	The spring 600 in Markworth biases the instrument toward an open position with fingers 206 extended outward

Operation of the Markworth instrument with spring 600 is illustrated in Figures 7A and 7B, reproduced above. It is crystal clear that squeezing the trigger squeezes the spring and pushes the instrument into a closed position in which the fingers are pulled into the sleeve 400. When the trigger is released, the spring biases the instrument back to an open position (Figure 7A). This is the exact opposite of the claim recitation and Markworth cannot anticipate.

The Examiner's response to Applicant's arguments defies ones eyesight. Despite the fact that the figures clearly show what they show – the Examiner says the opposite:

The retaining spring element, 600, of Markworth et al. does direct a grabber, 206, toward a closed position via slide, 300, and sleeve, 400, whereby the grabber is substantially contained within the outer sleeve when the trigger is released. (see paragraph 0051, particularly lines 10-23). Movement of the retaining spring element, 600, results in the advancement of the slide, 300, and sleeve, 400, which in turn directs the grabber, 206, toward a closed position (see paragraphs 0054 and 0055, particularly lines 6-9 of paragraph 0054 and lines 4-6 of paragraph 0055)

The three paragraphs cited by the Examiner all say the exact same thing that the Figures show. When the trigger is squeezed, the sleeve 400 is pushed over the fingers 206 to prevent the fingers from opening (i.e., the closed position). Releasing the trigger caused the sleeve 400 to be withdrawn so that the fingers 206 extend outward from the sleeve. The instrument can then be disconnected from the implant by twisting it off (i.e., the open position). None of these

paragraphs discuss the spring 600, however, resort to the Figures is perfectly clear. There can be no anticipation.

F. Markworth Fails to Disclose a Grabber that is Substantially Contained Within an Outer Sleeve When a Trigger is Released

Claim 1	Examiner's Correspondence in Markworth	Applicant's Position
"whereby the grabber is substantially contained within the outer sleeve when the trigger is released"	"whereby the grabber is substantially contained within the outer sleeve when the trigger is released (see figures 6A, 6B, 7A and 7B)."	When the trigger is released, Markworth withdraws the sleeve 400 exposing the fingers 206 outward.

Operation of the Markworth instrument with spring 600 is illustrated in Figures 7A and 7B, reproduced above. As expained above, it is crystal clear that squeezing the trigger squeezes the spring and pushes the instrument into a closed position in which the fingers are pulled into the sleeve 400. When the trigger is released, the spring biases the instrument back to an open position (Figure 7A). This is the exact opposite of the claim recitation and Markworth cannot anticipate.

#### G. The Dependent Claims

The Examiner's explanation of the rejections for the dependent claims are as incorrect as those for claim 1. Applicant believes that no further explanation beyond that provided in the Appeal Brief is necessary to address the Examiner's further argument.

### III. Conclusion

For the reasons noted above, as well as those argued in Appellant's Appeal Brief, Appellant submits that the pending claims define patentable subject matter.

In the event that a petition for an extension of time is required to be submitted at this time, Applicant hereby petitions under 37 CFR 1.136(a) for an extension of time for as many months as are required to ensure that the above-identified application does not become abandoned.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 141449, under Order No. 101896-719.

Respectfully submitted,

Dated: May 18, 2009

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